

# **SCIENTIFICALLY BASED RESEARCH DEFINITION FROM THE NO CHILD LEFT BEHIND BILL**

The remainder of this document can be referenced at <http://www.ed.gov/legislation/ESEA02/index.html>

## **SEC. 9101. (37) SCIENTIFICALLY BASED RESEARCH**

The term scientifically based research' —

- (A) means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and
- (B) includes research that —
  - (i) employs systematic, empirical methods that draw on observation or experiment;
  - (ii) involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
  - (iii) relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
  - (iv) is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;
  - (v) ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
  - (vi) has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.